

WHAT IS CLAIMED

1. A method for operating a fuel cell power plant to provide end-use electricity, end-use heat and end-use reformat, comprising the steps of:

providing a fuel cell power plant that consumes reformat to provide electricity and heat, said fuel cell power plant having a nominal reformat flow rate and including a fuel processor system for generating reformat from a hydrocarbon fuel;

operating said fuel processor system so as to provide a reformat flow at a rate greater than said nominal reformat flow rate;

operating said fuel cell power plant using a first portion of said reformat flow to generate said electricity and said heat, said first portion being less than or equal to said nominal reformat flow rate; and

providing a second portion of said reformat flow as said end-use reformat.

2. The method of claim 1, wherein said fuel cell power plant includes a fuel cell stack, and said second portion is separated from said first portion upstream of said fuel cell stack.

3. The method of claim 1, wherein said fuel cell power plant includes a fuel cell and wherein said second portion is separated from fuel cell power plant exhaust gas downstream of said fuel cell.

4. The method of claim 1, further comprising the step of storing said second portion.

5. The method of claim 1, wherein said fuel processor system includes a shift converter and said fuel cell power plant includes a fuel cell stack, and further comprising the step of separating said second portion from said first portion downstream of said shift converter and upstream of said fuel cell stack.

6. The method of claim 1, wherein said second portion contains water vapor, and further comprising the step of separating said water vapor from said second portion to provide said end use reformat and a recovered water portion, and returning at least a portion of said recovered water portion to said fuel cell power plant.

7. The method of claim 1, wherein said second portion is selectively provided as end use reformat and further comprising the steps of sensing when said second portion is being provided as end-use reformat and selectively operating said fuel processor system to provide a first reformat flow rate when said second portion is not being provided as end use reformat, and to provide a second reformat flow rate greater than said first reformat flow rate when said second portion is being provided as end use reformat.

8. A fuel cell power plant for providing end-use electricity, end-use heat and end-use reformat, comprising:

a fuel cell that consumes a reformat to provide electricity and heat;

a fuel processor system for generating said reformat from a hydrocarbon fuel, said fuel cell being communicated to receive said reformat from said fuel processor system; and

a bleed flow path downstream of said fuel processor system for conveying a portion of said reformat to an end use application.

9. The fuel cell power plant of claim 8, further comprising a control member adapted to detect flow in said bleed flow path, said control member being adapted to increase output of said fuel processor system upon detecting flow in said bleed flow path.

10. The fuel cell power plant of claim 8, further comprising a water recovery device positioned along said bleed flow path and communicated with said fuel cell power plant for returning recovered water to said fuel cell power plant.